Mesenteric Vascular Insufficiency

IN THIS ISSUE Doctors Stemmer and Connolly present a highly readable compendium of clinical observations concerning the various pathologic disturbances of visceral blood supply. It is a thoroughly researched document which chronicles the entry of medical and surgical thought into an area which was once the sole domain of the physiologist. Since they first became aware of the increase of mesenteric blood flow that accompanies the entrance of food into the intestine, physiologists have sought to clarify the mysteries that influence visceral blood supply. They appear to have identified a unique and extremely sensitive vascular system which has an autoregulatory mechanism with vasomotor responses unlike those in other vascular systems. Exaggerations of these responses can precipitate profound pathologic disturbances. Examples are the spotty intestinal gangrene caused by clinical shock when other organ systems retain viability, and the massive intestinal necrosis in Gram-negative sepsis, left heart failure, and other chronic low output syndromes. That these can occur in the absence of occlusive lesions in the mesenteric vessels suggests a breakdown of the normal humoral and neural mechanisms that preserve intestinal blood supply.

Two California surgeons, Dunphy and Mikkelson, must be credited with beginning the new era in the clinical management of chronic visceral ischemic syndromes caused by mesenteric arterial disease. Although the existence of these syndromes had long been suspected, Dunphy was the first to show that symptoms of chronic postprandial abdominal pain were often premonitory to the appearance of fatal intestinal gangrene. Mikkelson almost 20 years later was the first to demonstrate that relief of these symptoms could be provided by surgical removal of an obstruction in a mesenteric artery. The accuracy of arteriographic diagnosis and the refinement of surgical techniques that have now made possible the successful reconstruction of occluded or stenosed mesenteric arteries have created new questions in diagnosis and management. Why is one so rarely able to demonstrate functional changes in the intermittently ischemic gut? Are there other intestinal syndromes besides the one characterized by epigastric pain after eating? Is prophylactic operation indicated for the asymptomatic patient with multiple visceral occlusive lesions? Is "mesenteric steal" a real syndrome since for it to occur one must postulate an amendment to the accepted rules governing blood flow? Should both arteries be reopened in the symptomatic patient with lesions obstructing both the celiac and superior mesentary artery? If only one artery needs revascularization, which should it be? In the absence of major differences in collateral blood flow, why do some patients with median arcuate compression of the celiac artery have severe pain relievable by operation while others are completely symptom free? It is to be hoped that in the foreseeable future another medical progress report will supply answers to these questions.

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On the Responsibility and Authority of Physicians

THERE IS MUCH to suggest that the responsibility and authority of the physician and of the medical profession have been in an overall decline for a number of years. There is also much to suggest that the medicine and the medicine man of the time have always been an essential component of any society, and that in a society as focused on health and well-being as is ours, there must be unparalleled opportunities for physicians and the medical profession to assume many responsibilities and to take many new kinds of authoritative actions for the betterment of the public health. It would seem that these are times for imaginative leadership and action by medicine and certainly not for abrogating the responsibility and authority of physicians.

There can be no question that the responsibility and authority of physicians have lessened con-